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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/319,678 08/16/99 ESCHENMOSE

A 514485-3729

020999
FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE
NEW YORK NY 10151

HM12/0328

EXAMINER

KOROMA, B

ART UNIT

PAPER NUMBER

1627

DATE MAILED:

03/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>09/319,678</p>	<p>Applicant(s)</p> <p>ESCHENMOSER ET AL.</p>	
	<p>Examiner</p> <p>Barba M. Koroma</p>	<p>Art Unit</p> <p>1627</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims 1-28 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- | | |
|---|--|
| 15) <input type="checkbox"/> Notice of References Cited (PTO-892) | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 20) <input type="checkbox"/> Other: |

DETAILED ACTION

1. **Please Note:** In an effort to enhance communication with our customers and reduce processing time, a dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Jyothsna Venkat, Ph.D., Supervisory Patent Examiner at jyothsna.venkat@uspto.gov or 703-308-2439. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.
2. Claims 1-28 are pending in this application.

Election/Restrictions

3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

- Group I: claims 1-21, drawn to a compound which is a supramolecular nanosystem.
- Group II: claim 22, drawn to a composition comprising a library of different supramolecular nanosystems.
- Group III: claims 23, 24, drawn to a process of making a nanostructure as set forth in group I.

- Group IV: claims 23, 24, drawn to a method of making a library of nanostructure as set forth in group II.
- Group V: claims 25, 26, drawn to a process of "changing" nanosystems.
- Group VI: claim 27, drawn to the method of using nanosystems.
- Group VII: claims 28, drawn to a method of using libraries of nanosystems to identify catalysts.

4. The inventions listed as Groups I-VII do not relate to a single general inventive concept under PCT Rule 13.1 because under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The technical feature of supramolecular nanosystems meeting the limitations of the claims are known in the art (see for example US 5,316,906; US 5,328,985 and WO 96/13522). Therefore, supramolecular nanosystems feature does not constitute a special technical feature.

Species election

5. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

If applicant elects the invention of groups I or III, applicant is required to elect a specific nanosystem by setting forth the specific oligomers and functional units forming the nanosystem. In order to avoid confusion that may be caused by nomenclature and to proceed with more compact prosecution, applicant is asked to set forth election based on structure. Applicants are requested to fully define the molecular structure and not merely stating subgeneric groupings such as "pentapyranosyl" or "chromophore" but rather the actual structure.

If applicant elects the invention of groups II or IV, applicant is required to elect a specific library nanosystems by setting forth the specific oligomers and functional units forming the members of the library of nanosystems. In order to avoid confusion that may be caused by nomenclature and to proceed with more compact prosecution applicant is asked to set forth their election by structure. Applicants are requested to fully define the structure by setting forth the molecular structures and not by setting forth subgeneric groupings such as "pentapyranosyl" or "chromaphore" but rather the actual structure.

If applicant elects the invention of group V, applicant is required to elect a specific nanosystems by setting forth the specific oligomers and functional units forming the nanosystem and the equilibrium condition to be changed for example from those in claim 26. In order to avoid confusion that may be caused by nomenclature and to proceed with more compact prosecution applicant is asked to set forth their election by structure. Applicants are requested to fully define the structure by setting forth the molecular structures and not by setting forth subgeneric groupings.

If applicant elects the invention of group VI applicant is required to elect a specific nanosystem by setting forth the specific oligomers and functional units forming the nanosystem and the specific use intended. Applicant should also specify a specifically the electronic component, catalyst, microprosthesis in detail (for example, if applicants elect the use as a catalyst, then a process such as homogeneous catalysts for polyethylene formation under specified should be elected; if a electronic component is elected the specific component, e.g., a diode should be set forth etc). In order to avoid confusion that may be caused by nomenclature and to proceed with more compact prosecution applicant is asked to set forth their election by structure.

If applicant elects the invention of group VII, applicant is required to elect a specific library nanosystems by setting forth the specific oligomers and functional units forming the

members of the library of nanosystems including the metal(s). Applicant should clearly elect a process which will be screened with the catalyst. In order to avoid confusion that may be caused by nomenclature and to proceed with more compact prosecution applicant is asked to set forth their election by structure.

The groups listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the groups lack the same or corresponding special technical features for the following reasons: elements within the group are well known in the art as indicated by the references above. Hence, the groups of invention are not linked by a special technical feature.

6. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).
10. All inquiries pertaining to this case should be directed to *Barba M. Koroma*. This examiner can normally be reached at: **703 305 1915**, at ***9:00am to 5:00pm, Monday through Friday***.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jyothsna Venkat, PhD, can be reached at: 703 308 2439. The phone number for the organization where this application or proceeding is assigned is: 703 308 2742. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is: 703 308 1235.

Barba M. Koroma, PhD
Examiner
AU 1627

TECHNOLOGY CENTER 1600
SUPERVISORY PATENT EXAMINER
DR. JYOTHSNA VENKAT PH.D

J. Venkat
DR. JYOTHSNA VENKAT PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600